# Danthonia



Volume 6 Number 3 December 1997

NEWSLETTER OF THE AUSTRALIAN NETWORK FOR PLANT CONSERVATION

# The South-east Queensland Rainforest Recovery

**Project** 

Bruce Boyes, Rainforest Recovery Officer, WWF/Queensland Department of Environment

World Wide Fund for Nature (WWF) in partnership with the Queensland Department of Environment, landholders, industry and Landcare, conservation and community groups

Recovery plans operating under the Commonwealth Endangered Species Protection Act 1992 offer a very effective way of bringing threatened flora and fauna back from the brink of extinction. All too often conservation actions fail because they are ad hoc, random activities carried out with no thought given to what really needs to be done. A recovery plan, by targeting research and management actions at a specific conservation objective, minimises this problem.

So far, most recovery plans have focused on single species. However, due to both the need to rationalise costs as well as an increased understanding of ecosystem dynamics, there has started to be a shift in the

approach to recovery planning towards a habitat or ecosystem oriented approach. In Queensland, where the single-species approach has been dominant, financial and human resources are already stretched and we have only implemented recovery for around 20% of our threatened fauna and a disturbing 1% of our threatened flora.

In a paper delivered at the 1995 Back from the Brink workshop, Bruce Male (Assistant Director, Threatened Species and Communities Section, Environment Australia) advised that "The recovery planning process has been, and should continue to be, a practice-based learning experience that draws on the collective wisdom and knowledge of all of its participants....there exists considerable scope for the program practitioners and managers to expand on and define mechanisms to enhance...efficiency and effectiveness" (Recovery of Australian threatened species - a national perspective).

Also at **Back from the Brink**, David Papps, in his paper

(Cont. page 4)

## National Coordinator's Report

Jeanette Mill

his bumper issue of ■ Danthonia (24 pages!) marks the end of a year of major outcomes for the ANPC. The conference has showcased ANPC's achievements and set the Networks' plant conservation agenda for the next two years. The review has raised some structural issues which, I hope, will see the ANPC come of age as a thriving independent organisation. And in March 1998 the ANPC passes a milestone - it will be 7 years since the conference which lead to the formation of the Network!

#### Those Annoying Inserts

Please take the time to peruse your *Danthonia* inserts, as they contain valuable information. If a matter of importance to members comes to our attention after *Danthonia* has gone to the printers, but before mailout, it will be included as an insert. So don't leave them on the newsagent floor!

#### **Advisory Committee**

The ANPC Advisory Committee met on November 28. Much discussion focussed on the review and restructure.

#### Restructure

A committee is being formed to consider incorporation as an option for the ANPC. If you have recent experience of incorporation, particularly for a national organisation with its office in the ACT, the ANPC would benefit from hearing of your experiences. Please contact the

National Office.

#### Review

The Endangered Species Advisory Committee has considered the ANPC review, and recommendations will now be made to Senator Robert Hill, Minister for the Environment.

The major priorities for ANPC were listed in the lead article in the September issue of *Danthonia*. There may not be sufficient funds to carry out all of these objectives. Therefore decisions will be needed about which activities are high priority. It is clear we will have (Cont. page 3)

ANDVAL Botanic Gardens | ANDVAL Botanic Gardens | and National Merbarium tee

Prof Henry Nix (Chair) Pr David Aldgus 1998 Pr Tony Brown Mr Stephen Harris

Ms Katrina Jenez ARY Mr Ed McAlister

Ms Margaret Moore Dr Bob Parsons

Mr Tim Richmond

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(Continued from page 2) to continue to seek other sources of support to enable carrying out of our objectives.

Box 1 on ANPC Funding Resources stated that members' dues and in kind support come to \$110 000 currently and would be around \$140 000 for the 97/98 financial year. Around \$12 000 of this is actual dollars, the rest being contributions of members' own time and resources, such as organising regional groups and writing the Guidelines. This gives a better idea of the balance of cash the ANPC has at its disposal, and also the significance of members' in kind contributions.

The sources of support were listed in Box 1, and increases in any or all of these will assist the Network.

Some regional groups have secured external funding for activities (see articles this issue re Tasmania and NSW SW Slopes), and others are planning to seek funding.

An increase in staffing at the National Office level may not be possible, and in fact current staffing levels will be reducing from 1st January 1998. This can be partially offset by members becoming more involved in the running of the Network.

If ANPC incorporates, there will be formal positions of office which will be required, and opportunities for various action committees. Many members have made vital contributions through committees such as those which produced the guidelines and run the conferences. Hopefully their success will encourage others to participate in such action-based groups.

Fulfilling ANPC's objectives

Many of the outcomes which came from the recent conference can be implemented by members as part of their own work, and indeed are intended to be implemented at such a level. Look through the conference outcomes and see how you can contribute to fulfilling them.

Spread the word about the ANPC. Danthonia is a very effective way of prompting memberships. Extra copies are printed for promotional purposes. Contact the National Office for copies to distribute. Lyn Meredith in his article in this issue comments that the ANPC has set a target of only 400 members by 2000. This target is achievable within the current National Office staffing levels. If members are more active in spreading the word, this target could well be exceeded.

ANPC has long recognised the need to bring more councils into the Network. Why not visit your environmental officer and drop off a copy of *Danthonia* and a flyer about the Germplasm and Translocation Guidelines. Invite councils to participate in regional group meetings.

Join a regional group - help run a meeting, activity or field trip. Contribute ideas about plant conservation priorities in your region. Contact the National Office or an existing regional group about starting a regional group in your area.

Talk to a school, community or other interest group about plant conservation.

#### Documenting ANPC's success

One dilemma faced by the ANPC is that as we are a network our results are often

intangible, or if they're tangible the news may not have filtered through. In demonstrating success and submitting proposals to funding bodies, it is essential to be able to point to "on the ground" outcomes. There are several ways of overcoming this. The major one is to use current reporting processes, such as Danthonia and regional meetings. If you have taken an idea, contact, piece of information from an ANPC activity and turned it into an outcome for plant conservation, success or otherwise, let everyone know! Strengthen the Network.

The activities of the SW Slopes of NSW Region are an example of how regional networking can achieve tangible outcomes. Other less tangible, but nevertheless very important outcomes may be how use of the Guidelines or attendance at a conference has influenced your activities.

1999 Conference

The Advisory Committee suggested northern Victoria as a location. The conference is scheduled for 1999 (autumn or spring). A regional organising committee is required (perhaps a job for a new regional group) as well as a national committee. Suggestions for themes included in situ conservation and regional networking. Please contact the National Office if you are interested in participating in organisation or know of a suitable venue.

#### Guidelines

The first print run of 500 of each of the Germplasm and Translocation Guidelines have been distributed. Many requests are being received for copies from all over the world and a second print run is planned. They have been tabled at various national and international forums, where they have been well received. IUCN

Reports on ANPC activities have been recently submitted to the IUCN Council in early December via David Brackett, Chair, Species Survival Commission (SSC) and to the SSC Plant Sub-Committee via the Chair David Given.

#### Thanks and Best Wishes

It has been a year of challenges but also enormous achievement and recognition for the ANPC. I would like to thank all members for your continuing support of the Network and commitment to integrated plant conservation in Australia. You ARE the Network.

Best wishes for the festive season, and here is the traditional sprig of a threatened species, *Grevillea wilkinsonii*.



(Continued from page 1)

Commonwealth and State
Government frameworks for recovery planning for threatened species and communities, identified that "...more effort should go into threatened species conservation across bioregions and into threat abatement itself. Exclusive focus on single species is not cost-effective".

A bioregional ecosystem recovery approach is being taken with the South-east Queensland Rainforest Recovery Project. The Project will recover threatened rainforest species and ecosystems right across the South-east Queensland bioregion. The rainforests of South-east Queensland have a high concentration of threatened rainforest species, particularly plants. Indeed, more than one-third of all of Queensland's endangered plants are found in the South-east Queensland rainforests.

A focus on an easily recognisable group of ecosystems, eg. rainforests, means that the community will be able to more easily identify with and support the objectives of the project than they would if it was to look broadly at "remnant vegetation". Other similar ecosystem recoveries are planned, for example, South-east Queensland wallum and Brigalow Belt South grasslands.

#### Ipswich City Leads the Way

To ensure that the process is locally owned, recovery plans will be prepared for smaller, geographically and socially cohesive subregions within the bioregion. An

overall project management committee will coordinate across the subregions.

The first subregion is Ipswich City, west of Brisbane, thanks to the admirable cooperation of Ipswich City Council. A recovery team involving community groups, Ipswich City Council, the local TAFE college and the Department of Environment is currently overseeing the preparation of the Ipswich Rainforest Recovery Plan. The Plan is being written by Siobhan Bland, a University of Queensland student on industrial placement with the Department of Environment. This recovery plan will be used as a model for the rest of the region.

#### The WWF South-east Queensland Vineforests Project: A Firm Foundation

In 1991, WWF funded a Queensland Herbarium study of South-east Queensland vineforests. In all, 232 sites were studied, 63 of which were found to have high conservation value.

In 1996, WWF implemented a follow-up project, using the findings of the 1991 study to promote the conservation and management of the high conservation value sites identified in the study and subsequent surveys. The project was very successful, generating a high level of landholder, community, and government support for the conservation of significant dry rainforests. Proposals for a series of high conservation value vineforest sites are currently being implemented in conjunction with landholders and industry, and Landcare, conservation and community

groups.

Because of the success of the 1996 project, the Queensland Department of Environment (QDoE) initiated a partnership arrangement with WWF to initiate threatened plant and ecosystem recovery for the new QDoE Threatened Species and Ecosystems Unit. Under this 1997 project Queensland's first major endangered ecosystem recovery plan, the South-east Queensland Rainforest Recovery Project, has been successfully initiated. The partnership that has been developed between WWF and the QDoE is a key factor in the success of the project. WWF thanks the Department for its excellent ongoing support and cooperation.

### The 1998 Rainforest Recovery Conference

During 1998, rainforest recovery will be initiated for further subregions within the bioregion, using the Ipswich Rainforest Recovery Project as a model.

Information sharing and education on best-practice rainforest conservation will be necessary for the success of the project. A major conference in mid-1998 will bring together everyone involved in rainforest conservation throughout the region. For further details see the next issue of *Danthonia*.

Expressions of interest for paper presentations are welcome now.

Contact: Bruce Boyes, Phone: 07 3222 2529;

Fax: 07 3227 6386;

Email:

Bruce.Boyes@env.qld.gov.au

A bi-monthly newsletter, South-east Queensland Rainforest Recovery News, is widely circulated. Contact as above to be placed on the mailing list.

#### References:

Male, Bruce. Recovery of Australian threatened species - a national perspective. In Back from the Brink: Refining the Threatened Species Recovery Process. 1996. Surrey Beatty and Sons Pty Ltd in association with Australian Nature Conservation Agency, Canberra, ACT.

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Government frameworks for
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threatened species and
communities. In Back from the
Brink: Refining the Threatened
Species Recovery Process. 1996.
Surrey Beatty and Sons Pty
Ltd in association with Australian Nature Conservation
Agency, Canberra, ACT.



Austromyrtus gonoclada, with a ROTAP conservation status of 2E, grows in the area described and is the subject of a Recovery Plan.

Drawing by Terri Woollcott, from the collection of the Australian National Botanic Gardens.

### ANPC - So Far, So What?

Lyn D Meredith, Member

In the last issue of *Danthonia* there was a call for comment by members on the lead article advising readers of funding problems that are facing the ANPC.

I will not comment on the ANPC's funding proposal and the response by the **Endangered Species Advisory** Committee (ESAC) to that proposal, since I am employed by the organisation which administers the funding program. I would however like to make a number of general comments about the ANPC, as one of the original group that drafted the "Proposal for an Australian Network for Plant Conservation" in 1991.

Some members will be aware that that proposal came from the conference "Protective Custody? Ex situ plant conservation in Australasia" (1991) which owed its origin to a report about the conservation activities of Australia's botanic gardens. The initial thinking of the authors of the report (Mark Richardson and myself) was to establish a network for ex situ plant conservation, inspired by the Center for Plant Conservation in the USA and the then Botanic Gardens Conservation Secretariat (now Botanic, Gardens Conservation International). We were influenced by the writings of Don Falk and others to change the emphasis from ex situ (ie garden-based) conservation to embrace the

concept of integrated plant conservation. This is conservation based on the co-operative work of managers of the conservation estate (usually, but not always, national parks organisations) and the knowledge and skills of scientists and practitioners in botany and horticulture in botanic gardens and university and other laboratories. In practice such integration had often occurred but was seldom formally recognised and there were many land management agencies that were wary of the negative effect of too much emphasis on ex situ conservation. These issues have been debated at length.

The Protective Custody conference produced 17 resolutions but only one referred specifically to the establishment of a network and that said very little about what the network would do. In fact many of the other 16 resolutions have been taken up by the ANPC as part of its program. The Proposal had very little to say about the long-term programs and financial development of the Network.

Section 7B of the Proposal was an outline of proposed activities of the national co-ordinating office during the first year of operation. One of those activities that was never successfully realised has been the sourcing of funding other than from government programs. To my knowledge the ANPC has never seriously solicited funding (as cash) from private organisations, other than through annual membership dues. There have been, of course, 'in kind' contributions from member organisations

and individuals. The contribution of the Australian National Botanic Gardens and its parent organisation, now called the Biodiversity Group of Environment Australia, has been invaluable and is probably not fully appreciated by most members. However, it may be that such assistance has inhibited the Network from seeking funds from private sources, since there has always been sufficient funding to carry out the Network's core activities, as developed over the past 5 years or so.

Now that we have been

prompted by ESAC and others to consider our future program and its funding arrangements, I would like to suggest that this is an appropriate time for a radical re-assessment of the ANPC and its role. The review requested by ESAC, and briefly reported on at the Coffs Harbour conference this year, only called for an assessment of the Network's program as far as funds received from the **Endangered Species Program** (ESP) were concerned. That review is continuing at the time of writing and will enable ESAC to be better informed about how ESP funds will be spent, if indeed there are any available to the ANPC. But I wonder whether the Network's achievements since 1991 have been particularly effective for plant conservation on the ground and whether it should

In truth the ANPC has operated as an information exchange and this activity has been limited to the quarterly newsletter *Danthonia*, a bi-yearly conference, and the meetings of regional groups

become much more active in

practical conservation than it

has been in the past.

and the Advisory Committee. This may sound quite impressive but what have we achieved by these exchanges? It is unlikely that members are, overall, better informed now about plant conservation than if they were not members of the ANPC. There would be few members who are not well aware of plant conservation issues before they join. Specialist groups have produced valuable guidelines for re-introduction and germplasm storage and certainly these have been well received. The Conservation Techniques Course was similarly well appreciated.

But that's it! After 6 years we have a membership of approximately 300. The membership of the Australian Societies for Growing Australian Plants is 9000 and that of Birds Australia is over 5000. The review submitted to ESAC by the ANPC National Office listed among its targets 400 members by the year 2000. Such a small membership is insignificant compared with other organisations with similar goals. But more importantly, what is the Network doing for plant conservation? I mean as an organisation, not as individual members working separately or as part of other organisations.

I am a member of Plantlife, a UK-based organisation whose aims are very similar to those of the ANPC: to help in "stopping common plants becoming rare, rare plants becoming extinct and in bringing back lost species where they have disappeared". Plantlife was founded in 1989. By 1995 its membership had reached 6000 and in the Annual report for 1995-1996

the Chairman stated that "we now have almost 8000 members and could well soon reach 10000". I know that Australia's population is considerably less than that of the UK, but the ANPC is hoping for only 400 by 2000!

Plantlife is a registered charity and as such has certain taxation advantages, both for the organisation and for those donating to it. It produces a high-quality quarterly magazine. But most importantly, Plantlife is an advocate for plant conservation and seeks funds to purchase and manage significant land of conservation value. By late 1997 there were 18 such Plantlife Nature Reserves. The society also runs recovery programs. It has been recognised by the British Department of the Environment as a "Lead Partner" organisation for the conservation of nine of Britain's most critically endangered plant species. This is impressive conservation activity.

However, some ANPC regional groups <u>are</u> making efforts to involve themselves in practical activities, as has been outlined in *Danthonia*.

I admit that in the past I have argued with colleagues against the ANPC taking part in publicity campaigns for certain conservation issues. This was because I felt that the Network's 'hosting' by the Australian National Botanic Gardens, part of a Federal Government department, inhibited it in being seen as independent. Indeed many see ANPC as a program of ANBG, rather than as the independent non-government organisation that it really should be. And provided that the ANPC

continues in its innocuous way, not ruffling feathers, then it's not likely to be seen as having much impact on government policy, as perhaps it should try to have.

But I believe that the Network should do more for practical conservation than it has done so far. And that may mean that it might have to look for another home. It will certainly mean that a search for funding will become a major activity and this will require professional understanding of such matters. Plantlife engaged a professional to chase funds who knew little if anything about plant conservation, but a lot about marketing and selling.



To be most effective an organisation of the type I envisage needs a high profile, with high profile names on its letterhead. No matter how cynical we may feel about such window dressing, the fact is that a well-known name helps sell an organisation.

There may be ways of realising such aims by joining with another organisation that already has a large membership base and profile. We would need to decide whether the ANPC should aim to be a

Cont. page 8

Cont. from page 7
scientific society or a more
'popularly-based' one, and
this would determine the way
the Network should develop.

I see three options for the ANPC:

- to continue much as we are at the moment;
- to expand our community awareness role by improving the quality of our journal and exploring other media whilst maintaining a non-confrontationist role; or
- to become a much more active conservation organisation.

There is of course a fourth option which I prefer not to think about! I would be interested to hear the views of other *Danthonia* readers.

#### **ANPC Members!**

Please see page 3 of this issue for the National Coordinator's response to Lyn's comments about membership targets.

We welcome responses to and/or comments on the ideas expressed above.

Further responses to the lead article in the last edition of *Danthonia* (Vol 6, No 2, September 1997), which outlines the ANPC's objectives, major achievements and resources, are also very welcome.

### Caretaking Caladenia concolor

Paul Scannell, Albury Botanic Gardens, Co-coordinator, NSW South West Slopes Regional Group

local enthusiast and his Apartner, involved in monitoring populations of rare orchid species in NSW and Victoria, were strolling through the Nail Can Hill area and came across what they knew to be a single plant of Caladenia concolor, the endangered Crimson Spider Orchid. [ROTAP code 3VCi. Ed.] This prompted them to seek help in securing the area, as it had been subject to many years of abuse and neglect. Coming across a member of the ANPC at the Albury Botanic Gardens who could assist them, they set about making inquiries with the appropriate authorities as to how they could protect what they knew to be one of the most diverse areas of flora and fauna in the South West Slopes.

Contacts were established with the Department of Land and Water Conservation (DLWC), the ANPC and the NSW National Parks and Wildlife Service, The Administrator of Crown Lands. Wagga DLWC, was called in to inspect the site and confirm that it could be protected for the short term by locking it up. A strategy of involving local landowners, Council By-Laws Officers, Rural Fire Brigades, police and enthusiasts in a long term approach was adopted to ensure all players were involved in any decision making. Hopefully, a long term positive outcome of in situ conservation could be achieved.

With over 35 orchid species, the 160 hectares also contains

80-90 year old regrowth woodlands, large areas of prolific understory cover and a great array of fauna. Barking Owls, Turquoise Parrots, wombats, kangaroos, bats and a vast array of insects and reptiles all add to the conservation value of the area.

#### **Issues**

Many problems were identified, discussed and addressed with the appropriate authorities and suitable short term measures were instigated.

#### 1. Vehicle Access

Many vehicles were not using the trails and many new tracks were developing, including one less than a metre away from the single plant of *Caladenia concolor*.

Gates were locked and Crown Lands signage, provided by DLWC, was erected. Fences were temporarily repaired and local landowners were asked to report to the Botanic Gardens or the police any vehicles with trailers, trail bikes and four wheel drives entering the area.

After several rammings and incidents with boltcutters, case hardened chains and padlocks have been successful in reducing the impact of unauthorised vehicles.

The police have been fantastic in patrolling the area and several times have been seen chatting with drivers and trail bike riders who have been attempting entry.

#### 2. Clearing of rubbish

There is a long history of rubbish dumping in the area: garden refuse, builders' rubbish, concrete and car bodies. Albury City Council cleaned up all the areas required.

required.

#### 3. Firewood collection and rock removal

There was an urgent problem with vehicles continuously loading wood and rocks from the site. Once the landowners, bushwalkers and regular users were given contact numbers for the police and the Albury City Council's By-Laws Officer, these incidents were almost eliminated.

4. Noxious weeds and rabbits The Albury City Council's Noxious Weeds Officer was notified of the location of blackberry and St John's Wort populations and these have

been put on to the record for regular attention.

The Rural Lands Protection Board was contacted about the rabbit populations. These have been recorded and the Calicivirus has been introduced.

#### 5. High fire risk area with surrounding houses

The two Rural Fire Brigades were asked for the best options in the area and were issued with keys to the gates prior to the area being locked up. The options of trialling mosaic burn-offs, controlled grazing and having the high voltage transmission line easement as a firebreak were looked at, resulting in a strategy using all three in a long term approach.

#### 6. Fencing the firebreak

The Greening Australia Fencing Initiative was open and we decided to put in a submission to fence off the transmission line easement and to control graze in order to slow down invasive weeds and create a firebreak that would reduce the need for extra

activity in the woodlands.

After a successful submission, we set about the task of organising volunteers to erect the fence. Within the easement, there was a high quality vegetation area that also needed isolating when the cattle were introduced.

The Albury City Council Landcare Program funded the balance of the cost of the fence and volunteers put in three weeks of hard yakka to build the fence and install gates with fire brigade involvement in the location.

It was decided to trial control grazing with low stock numbers for a maximum of three times a year, outside native plant seed set times, to reduce the fuel load.

#### Outcomes

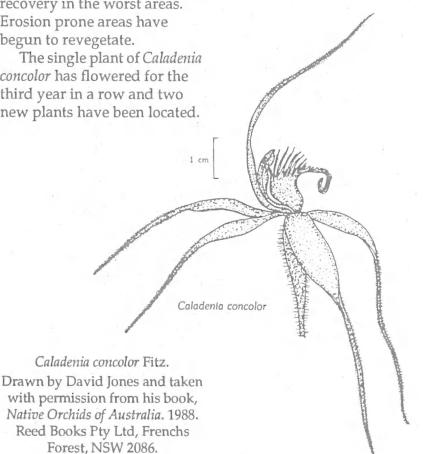
After almost two years of community based in situ conservation activities, the area has shown signs of rapid recovery in the worst areas. Erosion prone areas have begun to revegetate.

concolor has flowered for the third year in a row and two new plants have been located. Two new leaves are awaiting flowering for verification. This is an excellent result considering the limited resources available for. studying the area.

Turquoise Parrots have been using the nesting site that was located, but unfortunately no eggs were laid this year.

DLWC have been using the area for staff training in local flora and fauna and at present there is a Charles Sturt University project studying the bat populations in the woodlands.

A pedestrian stile is being installed over the fence. Signage to explain the project is being discussed, but similar signs have been heavily vandalised throughout the area. So if anybody knows of a bulletproof, four wheel drive proof and texta proof sign producer, please let us know!



#### Fifth International Botanic Gardens Conservation Congress



#### Kirstenbosch, Cape Town, South Africa 14-18 September 1998



Plants, People and Planet Earth - the role of botanic gardens in sustainable living

Hosts for this fifth congress are the National Botanical Institute (NBI) of South Africa, with the working sessions at Kirstenbosch National Botanical Garden. The local organising committee is headed by Professor Brian Huntley, Chief Executive of the NBI. The ANPC is pleased to be a co-sponsor of the Congress.

Program: The program will include keynote papers and broadbased integrative sessions interspersed with more focused sessions. These will cover themes such as building the botanic gardens conservation network, the challenges posed by the Convention on Biological Diversity, science and botanic gardens and environmental education and interpretation. There will be workshops on topics such as practical horticulture, fundraising, conservation genetics, the role of herbaria in botanic gardens, reintroduction, genebanks and database management. On 15 September there will also be a Forum for Trustees from botanic gardens, with papers on strategic issues for botanic gardens in the 21st century.

Tours: Midweek tours will go to areas such as Cape Point and the Cape Peninsula National Park, the West Coast National Park, the Karoo and Harold Porter National Botanic Gardens and Cape Town (urban conservation). There are also two pre-Congress tours: east to see the Cape fynbos vegetation, caves, mountain views, historic towns and more, and west to see the West Coast National Park, mountain flowers, nurseries, a site of Bushman rock art, flowers of Namaqualand and the Goegap Nature Reserve. The post-Congress tour will be the same as the second pre-Congress tour.

**NOTE:** For further information, please see the copy of the first Congress Newsletter which has been mailed with this edition of *Danthonia*.

Contacts: The organisers are establishing a Web site. Their email address is: bgci98@nbict.nbi.ac.za. Their postal address is: National Botanical Institute, Private Bag X7, Claremont 7735, Cape Town, South Africa. Phone: +2721-762 1166; fax: +2721-761 4687.

Advertisement

## The Wollemi Pine - Wollemia nobilis A Portrait

Christine Payne is a well-known Canberra botanical illustrator and teacher who was invited to represent the ACT in last year's sesqui-centennial exhibition of Botanical Illustration at the Royal Botanic Gardens (RBG), Melbourne.

Chris produced an extensively researched and beautifully drawn protrait of the Wollemi Pine in the form of a studio print, embossed and hand-watercoloured. The edition, limited to 250, is keeping Chris busy with the sable brushes and aquarelle pencils and they are now for sale to order.

Produced with the sensitivity and integrity we have come to expect from Chris's work, the originals are priced at \$390, with a colour reproduction (same size, not

embossed) a very faithful alternative at \$40 (both unframed).

The very first of the originals (No. 1 of 250) was bought by the Director of the RBG Melbourne for the State collection.

In appreciation of research assistance, Chris has presented Wollemi portraits to the Royal Botanic Gardens Sydney, Mt Annan Botanic Garden, the Australian National Botanic Gardens and to the Wollemi National Park.

Phone 02 6258 4620 for a brochure.

#### Contemporario

#### Major Congress in Parks and Recreation Comes to Melbourne

18-23 October 1998: Melbourne Convention Centre, Melbourne, Victoria Australia 3000. This is the 18th International Federation of Park and Recreation Administration (IFPRA) World Congress and Royal Australian Institute of Parks and Recreation (RAIPR) National Conference. At the last World Congress there were delegates from 26 countries and this one is expecting at least as many. A number of international and national speakers will challenge all participants over the workshops, technical tours, posters and paper presentations that will focus on the theme "Changing Societies - the Challenge for Parks and Recreation". In association with this exciting program will be an equally informative International Park and Recreation Expo where industry will have the opportunity to offer equipment and services to the world. Further information on registration may be obtained from the Congress Secretariat, The Meeting Planners, on: Phone: +61 (0)3 9819 3700; Fax: +61 (0)3 9819 5978; OR Phone: +61 (0)3 9696 0666; Fax: +61 (0)3 9696 0808 for **Exhibition and Trade Fairs Pty** Ltd for inclusion in the International Park and Recreation Expo.

#### The Organisation and Expression of the Genome

16-20 February 1998: Erskine House, Lorne, Victoria 3232.

This is the 20th Annual Lorne Genome Conference, the major annual gathering of Australian molecular geneticists. The focus of the Conference is the genome and how it relates to all organisms. The primary emphasis is on genome organisation and evolution, gene technology, gene mapping, gene expression and development. For full details of speakers,

venue, registration and accomodation, please visit http://lorne-genome.angis. org.au/.

Ifyou have trouble with that URL, try

http://www.angis.org.au/ lorne-genome

Registration and accomodation will be handled electronically. Full details are on the Web page. If you do not have Web access, email Genome.Conference@jcsmr. anu.edu.au

for an email/hard copy of the registration form.

Contact also: Dr. Rohan Baker, John Curtin School of Medical Research, Australian National University, GPO Box 344 Canberra ACT 2601 Australia. Phone: 02 6249 3824; International + 61 2 6249 3824;

Fax: 02 6249 4712;

International + 61 2 6249 4712.

#### Moving Forward Through Innovation

22-27 March 1997: Taronga Zoo, Sydney, NSW Australia.

This is the Australasian Regional Association of Zoological Parks and Aquaria/Australasian Society of Zookeeping (ASZK) 1998 conference.

Contact: Narelle Storey, Conference Coordinator, Taronga Zoo, PO Box 20, Mosman NSW 2088.

Phone: +61 2 9978 4678; Fax: +61 2 9969 7515;

Email: jennyv@ozemail.com.au

#### **Global Biodiversity** Forum

1 - 3 May 1998: Bratislava, Slovakia.

Contact: Caroline Martinet, **IUCN-The World Conservation** Union, 28 Rue Mauverney, CH-1196 Gland, Switzerland.

Phone: +41 22 999 0001;

Fax: +41 22 999 0025;

Email: ccm@hq.iucn.org

#### Fourth Conference of the Parties to the Convention on **Biological Diversity**

4 - 15 May 1998: Bratislava, Slovakia.

Contact: CBD Secretariat, World Trade Center, 393 St. Jacques Street, Suite 300, Montreal, Quebec, Canada, H2Y 1N9.

Phone: +1 514 288 2220;

Fax: +1 514 288 6588;

Email: biodiv@mtl.net.



#### Genome Resource Network of Australasia

Richard Schodde, Department of Wildlife and Ecology, CSIRO, Canberra

The first meeting of participants in the Genome Resource Network of Australasia was held on Friday 1 August and Saturday 2 August 1997 at the Quarantine Station at North Head, Sydney. The program was extensive but the aim of the meeting was to initiate discussion and debate on the broad range of issues pertinent to the storage, management and use of biological materials. The following is an overview of outcomes.

#### **Mission Statement**

Linking those collecting, storing and using biological materials for research, management and conservation. Background

Genome resource banking and assisted reproduction techniques are emerging technologies with potentially far-reaching application to species management and conservation. Turning the genome resource banking concept into a reality is technically, logistically, legally and ethically problematical. Yet in Australasia alone, there are several genome resource banks (GRBs) in operation or being developed and numerous

people whose work relates to either the management or the use of stored genetic material. The Genome Resource Network of Australasia (GRNA) is a new initiative aiming to facilitate communication and collaboration between individuals and organisations with an interest in genome resource storage and research. The network was initiated as a joint venture of the Co-operative Research Centre for the Conservation and Management of Marsupials and the Australasian Regional Association of Zoological Parks and Aquaria. The GRNA is intended to be an independent network co-ordinated by an advisory committee with members from a range of related fields and organisations.

#### Aims

To provide a network to link the diverse skills, interests and resources of its members by promoting and facilitating

- I. communication and information exchange
- II. quality management and co-operatively ethical use of biological materials
- III. integration of in situ and ex situ conservation efforts
- IV. public and professional awareness of the need for integrated multidisciplinary approaches,

and so optimise their effectiveness in research, management and conservation.

#### Who and Why

The GRNA is a forum for communication, cooperation and support open to all those working with biological materials in research, management and conservation. Its first

meeting was held in Sydney in August 1997. Present at the meeting was a diverse group of workers from a wide spectrum of organisations concerned with genome resource management. Australia-wide institutional representation came from major zoos, State conservation agencies, CSIRO, cooperative research centres and universities; and participants included reproductive biologists, conservation and evolutionary geneticists, veterinarians, taxonomists, virologists, immunologists and national and international conservation managers.

Many issues covering the conservation of genetic resources were canvassed at the meeting. They ranged from native flora and fauna to exotic species (including pests), agricultural species, and biomedical resources such as animal strains and cell lines. These emerge as the GRNA's areas of concern, which also involve the wider Australasian region generally; thus its conservation focus is not restricted to indigenous Australian biota.

#### Beyond Zoos and Botanical Gardens

Although genome resource banking developed as a concept out of conservation practice in zoos and botanical gardens, it has now become relevant to a wide range of disciplines and practitioners concerned with the identification and long-term conservation, in situ as well as ex situ, of threatened plants and animals, and their tissues and products, whether captive, cultivated, wild or domestic, or biomedical models.

The perceptions of the inaugural meeting have shaped the GRNA's vision. The tasks of genome resource banking are not seen as simple, nor is genome storage perceived as a panacea for species conservation. Quick fixes are not likely, nor, as one participant put it, do we 'want to simply employ high technology to document extinction'. Rather, the GRNA is enthusiastically committed to an inclusive, cooperative approach to link the expertise and resources of our region for biological conservation in all its facets.

### What is Genome Resource Storage?

Genome storage is a mechanism for keeping reproductive and biological reference materials (e.g. blood products, tissue, cells lines and DNA) virtually indefinitely by very deep freezing. Compared to the keeping of fully developed animals, its cost is relatively low. The GRNA encourages genome resource storage in its widest sense, from reserve banks of reproductive material and cell lines to tissue and DNA reference banks for molecular, evolutionary and biomedical research. Yet it does not advocate indiscriminate 'banking' of material for some science fiction outcome in the future, such as the regeneration of the Thylacine from stored DNA in museums. Rather, it is concerned with integrated outcomes for both the future and the here-and-now, and sees information transfer about reproductive and genetic technologies as integral to its effectiveness. The GRNA

acknowledges the limitations of artificial breeding technology outside of agriculture and medicine, and thus espouses the development of technologies and procedures that will manage and assure the future quality of all biological material stored for such purposes.

#### Why Genome Storage?

The GRNA sees the storage of reproductive and reference tissues as having significant potential as an additional tool in the repertoire of technologies for identifying and preserving critically endangered and otherwise significant and valuable species. In particular, preservation of gametes, embryos and seed potentially allows animals and plants of higher genetic importance to continue to form part of a breeding population long after the death of the organism. Allied with this comes the capacity to manage the genetics of small populations, so that extant genetic diversity is preserved and the deleterious effects of in-breeding and inheritance of undesirable traits minimised. The genome storage technology underlying these potentials is, nevertheless, only an addition to and not a replacement for conventional in situ and ex situ conservation techniques.

Other benefits flow from genome storage, as a biomedical source for understanding the structure and behaviour of genomes, including harmful genes, as well as providing genic sequences for clarifying the unique identity of Australian flora and fauna, and for finger-printing the pedigree of rare

animals towards controlling illegal trafficking in fauna. In addition, plants and animals are sources of potentially useful genes for primary industry, pharmaceutical products etc. These resources are still poorly tapped, and future options will be lost with every species that becomes extinct.

#### Which Kind of Bank?

Not all genome banks are the same. The GRNA sees a need for banks that serve three different functional purposes:

- The Future Bank. This bank insures for the future. Its aim is to preserve reproductive material of a cross section of available genetic diversity to be used as required for breeding programs centuries into the future. In addition, this bank must hold reference material of donor animals and plants (non-reproductive tissues, serum, DNA) so that their identity and health status can be cross-checked whenever necessary.
- 2. Management Bank. This bank contains the same type of materials as the Future Bank (reproductive and reference), but is actively and regularly used and turned-over as part of routine species management in in situ and ex situ conservation programs.
- 3. Research Bank. This is a reference bank only. Rather than preserved reproductive material for use in breeding programs, the Research Bank stores a wide range of biological materials such as tissue samples, cell lines, sera, DNA, skins, bones and seeds which are

needed by researchers in diverse fields, from molecular systematics and palaeontology to molecular biochemistry and biomedical research.

#### To Find Out More

Anyone interested in finding out more about the network is invited to visit our web site at

www.grna.mq.edu.au or to contact the GRNA Working Group Chair Richard Schodde, Department of Wildlife and Ecology, CSIRO, Canberra PO Box 84 Lyneham ACT 2602.

Phone: 02 6242 1693;

Fax: 02 6242 1688;

Email: R.Schodde@dwe.csiro.au.

#### **ANPC Home Page**

Thank you to Murray Fagg, Director Visitor Services, Australian National Botanic Gardens, for updating the ANPC Home Page.

The site now has a new home page, a membership form, the conference resolutions and an expanding collection of useful links. It is hoped that the site will continue to grow, with more links to other web sites including, importantly, members' sites, copies of *Danthonia* and information about ANPC publications.

Please contact the National Office if you wish to discuss linking the ANPC site to yours.

The site is located at:

http://www.anbg.gov.au/anpc

If you have any feedback please don't hesitate to contact the National Office.

#### A World Database on the Conservation and Sustainable Management of Trees

John Benson, Royal Botanic Gardens, Sydney NSW

The World Conservation Monitoring Centre (WCMC) at Cambridge, England, is coordinating the development of a database on the world's threatened tree species. This project has been funded over a three year period by the Government of the Netherlands. Previous meetings have been held in Zimbabwe (for African trees) and Costa Rica (for North and South American trees). In August this year a third meeting was held in Hanoi, Viet Nam to cover Asian trees (including trees in Australia).

In short the project aims of the WCMC project are to:

- Develop a world list of non-threatened and threatened trees using the 1994 World Conservation Union (IUCN) Red List threat categories;
- Report on sustainable management of these tree species and their habitats;
- Provide this database as an on-line service;
- Further develop the IUCN Species Survival Commission (SSC)'s Tree Networks.

#### The Hanoi Workshop

The workshop was attended by 40 botanists representing most of the countries of the region including Viet Nam, from Malaysia, Indonesia, Republic of Korea, Philippines, Laos, China, Taiwan, India, Sri Lanka and Australia. Experts from Kew Gardens England, the USA and Italy also attended.

The forest in most Asian countries has been extensively cleared or logged and what remains is under threat. For most tree species quantitative data about populations and distribution is lacking, and this made it difficult to apply the 1994 World Conservation Union (IUCN) categories.

One project of note is a large long term monitoring study of 2554 nine ha plots scattered over Indonesia with the aim of assessing tree growth rates and species composition change. This will provide data to assist the long term planning of forest harvesting and management - that is, if forest survives the current catastrophic fires!

I addressed the state of tree conservation and the development of the ROTAP list over the last two decades in Australia.

#### World Tree Database

At present 27 500 tree species are on the world tree database with 4000 of these having an IUCN global status as being threatened. The database has standard reports for presenting data and data can be exported in a number of formats. Since WCMC is in charge of a number of other databases and aware of initiatives such as the IOPI database for vascular plants, incompatibility between these different databases should be kept to a minimum.

The project will not complete this huge task without further funding and this has been requested. Gaps in knowledge will be highlighted in the final WCMC report.

Applying the 1994 IUCN Red List Categories to Tree Species

As part of the workshop we were provided with known information on 60 tropical rainforest tree species and assessed the status of these species under the 1994 IUCN categories. Guidelines for the application of the categories were drawn up by WCMC. Delegates found it difficult to assign some species to categories due either to a lack of data or because they were widespread, being common in some countries but rare in others. There was a particular problem in applying criterion A of the 1994 IUCN categories (this deals with population reductions over time or over generations) to long-lived tree species where a generation may be in excess of 100 years. For many tree species numerous individuals remain in forests even though 50% of the habitat may have been cleared over a relatively short period. Should these species be considered endangered? I suggested that a species conservation status, ie. populations protected in reserves, could assist in applying this category.

I tabled some proposed modifications to the 1994 IUCN categories mooted by Keith and Burgman (in review) that aim to improve the application of the categories to plant species. Over the next few years Australia will need to settle on new categories for the ROTAP (ANZECC) lists to conform with other parts of the world.

Establishment of SSC Asian Tree Specialist Group

It was resolved that a SSC south Asian tree specialist group should be established. This would mainly deal with tropical or subtropical taxa. Existing conifer, cycad, palm and temperate forest specialist groups would complement this new group.

Inspections of the Viet Nam countryside

As part of the workshop we visited Ba Vi National Park south wet of Hanoi. The countryside is cleared and cultivated in all low lying areas, foothills up the border of the mountain-top reserve. Few large trees are left in the reserve but a diverse range of species grow there. Members of the Fagaceae and Conifers are prominent on the peaks in the NP.

We also inspected Da Chong Experimental point where two species of Australian acacias (Acacia aulacocarpa and A. meisneri) have been hybridised to produce more vigorous growing trees. These acacias, along with Eucalyptus camaldulensis, are the most widely planted trees on degraded lands. The aim is to provide rapidly growing trees to meet the demands for firewood which remains the main source of fuel for cooking in rural Viet Nam.

After the workshop I travelled to the hill country in the north of the country near the Chinese border. Little forest remains, as it has been cleared for shifting cultivation and firewood over hundreds of years. Regrowth is constantly harvested for firewood and primary

rainforest trees are extinct over vast regions. Small pockets of forest remain in protected areas such as Ba Be National park but even this reserve has 7000 people living in it, some still practicing shifting cultivation.

Off Haiphong on the coast to the east of Hanoi is the Halong Bay World Heritage site. This extraordinary karst landscape is composed of 3000 islands containing steep limestone cliffs, naturally vegetated hill-sides, coral reefs and sandy beaches. It appeared over-fished, polluted and not particularly well managed for a World Heritage site. Cat Ba National Park, within this area, contains one of the few remaining stands of lowland tropical rainforest in Viet Nam.

#### Reference

Keith, D.A. & Burgman, M.A. (in review) An evaluation and modification of IUCN Red List criteria for classification or extinction risk in vascular plants.

#### Electronic Addresses

#### Natural Heritage Trust Guide to Applications for 1998/99

http://www.nht.gov.au. See also *Danthonia* insert this issue.

## Greening Australia ACT & SENSW

gaact@netinfo.com.au

#### The Peter Murrell Nature Reserve

Pieter van der Meer, Society for Growing Australian Plants Tasmanian Region Inc.

The Peter Murrell Nature Reserve is situated close to a burgeoning residential area in Blackman's Bay, south of Hobart in southern Tasmania. The land was originally purchased in the 1970s by the Housing Department, partly funded by the Federal Government, and earmarked for future housing development.

The Reserve consists of 133ha of forest, woodland, heath and sedgeland as well as small areas of grassland, and is bounded on three sides by the Peter Murrell Conservation area of 135ha. Botanical Surveys show the presence of seven distinct mappable plant communities which are poorly reserved elsewhere in Tasmania. Four of these have less than 1% of their original areas in secure reserves and include lowland tussock grassland and Eucalyptus ovata forest. Of the described but non-mappable communities, Stipa mollis-Danthonia grassland and shrubby Eucalyptus ovata forest/ woodland are not known from any secure reserve in Tasmania. The Reserve gives these areas high conservation priority despite their limited area.

Approximately 200 species of vascular plants, including 37 orchids, have been listed for the area. A recent rediscovery, Prasophyllum concinnum R2 (R2 = rare in Tasmania), wasfound in the reserved area as well as Caladenia alata R2, unreserved. Other species

with state-wide significance are luncus amabilis R2, unreserved, and Restio monocephalus, R2 but very common in the Reserve (Duncan and Duncan 1995; Kirkpatrick and McQillan

In recent years SGAP members have used the area for botanical excursions and soon became aware that the area around Buttongrass Creek was still in very good condition and had the potential for high conservation value. This was later confirmed in reports carried out for the Huntingfield/Coffee Creek Landcare Group by Professor J. B. Kirkpatrick and Dr P. B. McQillan of the University of Tasmania. It is this area that forms the core of the Peter Murrell Nature Reserve.

The original Coffee Creek area is included in the multi-purpose Conservation Area, and has become a good buffer zone. Work is proceeding in this area on weed control and rubbish removal. The aim of the Landcare Group is to educate the public on sensitive use of the area and the establishment of walking tracks only in the Reserve. In 1995 the Huntingfield/

Coffee Creek Landcare Group, in conjunction with the SGAP, applied to the state government to seek reserve status for approximately 100ha, being the complete catchment area for Buttongrass Creek, so named for the presence of Gymnoschoenus sphaerocephalus, commonly called Button Grass.

On August 31 1997 the Peter Murrell Nature Reserve of 133ha was officially opened by Mrs Jean Murrell, the widow of Peter Murrell, the first Director of Parks and Wildlife in Tasmania.

#### References:

Duncan and Duncan, 1995. Vegetation Resources and Management of the Coffee Creek Reserve and the Huntingfield Estate.

Kirkpatrick, J. B. and McQuillan, P. B. 1996. Biological Resources, Reservation and Management of the Huntingfield Estate, Tasmania. Unitas P/L.



#### Electronic Addresses

#### **INetPC**

Indonesian Botanic Gardens: http://www.bogor.indo.net.id/kri Indonesian Network for Plant Conservation:

http//www.bogor.indo.net.id/inetpc

They are linked so you only need one address.

## IUCN Species Survival Commission

http://www.iucn.org/themes/ssc/index.htm

This site has information about the SSC and its Specialist Groups and publications, draft invasive species guidelines for comment, the full *Analyses of the Proposals to Amend the CITES Appendices* and more.

#### Measuring Biodiversity, Rarity and Conservation Priority

http://www.nhm.ac.uk/science/projects/worldmap

The Biogeography and Conservation Laboratory's research program is a specific Natural History Museum (NHM) response to the Convention on Biological Diversity. It collaborates with the NHM Biodiversity Information Unit to create high quality biodiversity information products and services tailored to meet the needs of different users.

## Nature Conservation Council New South Wales

Updated Web site: http://www.nccnsw.org.au

The site includes the NCC on-line calendar, an email announcement list and media releases. To come are NCC member sites, and the NCC has set up a web site development program to aid member groups to develop their own web sites.

For more information about the program, contact the Webkeeper, Kim Brebach, at the NCC on Tuesdays.

Phone: (02) 9247 4206;

Email: webkeeper@nccnsw.org.au

#### Australian Biological Resources Study (ABRS)

Updated address:

http://www.anbg.gov.au/abrs/

This has descriptions of all published volumes in the Flora of Australia and Fungi of Australia series and others. The Guides for Contributors and Guide for Illustrators will soon be added. The Grants Administration Unit will make available details of preferred research objectives and successful grants through the Participatory Program.

The Fauna Section will also be listing similar publications and products, and there is also a link to information about the ABRS "Platypus" software.

#### **Biodiversity Forum**

http://real.geog.ucsb.edu/bioforum

This is a site funded by the National Science Foundation (US) designed for people to express and exchange views on biodiversity loss and conservation. It serves three complementary objectives: public exchange of opinions, public education, and social science research.

Current discussions focus on management of non-native plant and animal species, and on the role of natural disturbances such as fire.

For mor details contact the Web site or send an email to webforum@geog.ucsb.edu.

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#### **Natural Heritage Trust**

See page 15 and insert.

Currently Available Small Grants

Please contact the ANPC National Office for details. They include:

The Bay Foundation: for research in areas like environmental education. Deadlines 1st March, September and December.

Explorers Club: research in the field by grad students deadline 31 January - and a Youth Activity Fund deadline 19 April.

Wildlife Conservation
Society: conservation of
threatened wildlife,
communities and ecosystems.
Deadlines 1 February, June
and October.

#### Courses

#### Smithsonian Environmental Leadership Course

2-13 March 1998: the Smithsonian Conservation and Research Center, Front Royal, Virginia, USA.

It is run by the Measuring, Monitoring and Assessing Biodiversity Program.

"This... course in persuasive communication skills and management strategies will give you the expertise you need to move policy makers and funding agencies to adopt and support your programs."

## Biodiversity, Measuring, Monitoring and Research

**10 May - 12 June 1998:** venue as above.

"This intensive...course provides an opportunity for you to gain expertise in effective strategies for developing, carrying out, and maintaining long-term biodiversity programs."

For more information about either program, contact Christopher Ros, SI/MAB Program Coordinator, Smithsonian Insitution, 1100 Jefferson Drive, SW., Suite 3123, MRC 705, Washington, DC 20560.

Phone: +1-202-357-4793;

Fax: +1-202-786-2557;

Email: cjr@ic.si.edu

Home Page:

http://www.si.edu/organiza/museums/ripley/simab/start.htm

#### Burrle ende

# Second International Conference on Environmental Management (ICEM2)

10-13 February 1998: University of Wollongong, NSW.

A forum for academics, researchers, engineers and scientists working in environmental management and sustainable development.

Contact: Conference Manager, James Cook.

Phone: 02 4221 8095;

Fax: 02 4221 8001;

Email: j.cook@ouw.edu.au

#### Workehope

## Environmental Issues in Decommissioning of Minesites

9-10 March 1998: Brisbane: run by the Australian Centre for Minesite Rehabilitation Research (ACMRR).

The workshop will cover topics such as revegetation, land capability, water quality and community consultation.

Contact: Mr Ron McLean, Manager - Technology Transfer, ACMRR, PO Box 883, Kenmore Qld 4069.

Phone: 07 3212 4556;

Fax: 07 3212 4574;

Email:

R.McLean@mailbox.uq.edu.au

#### Starting it Right: Rehabilitation of Arid and Semi-arid Areas

20-22 May 1998: Kalgoorlie-Boulder, Western Australia. Next biennial workshop of the Goldfields Land Rehabilitation Group (GRLG).

Contacts: Gerry Bradley,

Phone: 08 9080 6406;

Fax: 08 9080 6404;

Email: Gbradley@rgc.com.au, OR GRLG President, Ray Gerrard.

Phone: 08 9021 5716; Fax: 08 9091 1743.

#### **Publications**

Tropical Forest Remnants: Ecology, Management and Conservation of Fragmented Communities. 1997. Eds. William F. Laurance and Richard O. Bierregaard Jr. University of Chicago Press, Chicago, Illinois. USA.

Ordering: paperback 0-226-46899-2 is US\$38.00. Send to Orders Department, The University of Chicago Press, 11030 South Langley Avenue, Chicago, Illinois 60628. USA.

Phone: 773-568-1150;

Fax: 773-660-2235.

UCP Web Page address:

http://www.press.uchicago.edu

A Practical Guide to Soil Lichens and Bryophytes of Australia's Dry Country. 1997. David Eldridge and Merrin E. Tozer. Photgraphs by Heino Lepp. Department of Land and Water Conservation, Sydney NSW.

#### Regional Groups

#### **NSW Western Slopes** Region

Report of the meeting held on 1st November 1997

Bob Waters, Group Coordinator

ur spring meeting, held at Burrendong Arboretum, was the second scheduled day planned by the group and, although not well attended, was an interesting and enjoyable gathering for the members who came along.

After an informal discussion the group set out as planned to inspect Swainsona recta, the endangered Small Purple Pea, which is indigenous to the site and is being closely monitored and managed by its Recovery

Gay Bennison, a member of the Arboretum staff and of the Recovery Team, led us on our tour, answering our questions and explaining the work of the team. Unfortunately it was too late to see these plants in flower: the spring here had turned very dry and our daytime temperatures were more like summer than spring, so we were only able to view the plants in their fruiting stage.

Our tour then took us to Harris Lookout, an area within the Arboretum giving us sweeping views of Burrendong Dam. While enjoying the view, our discussion turned from plants to the Dam, its uses and users, and the current problems associated with the low water levels.

Some of the group had not had the pleasure of seeing the flowers of Eucalyptus macrocarpa so from the Lookout they were our next stop, along with a walk through our western beds and a look at the flowering shrubs there.

The group dispersed at this point, some heading home, others having lunch and enjoying the Arboretum at their leisure.

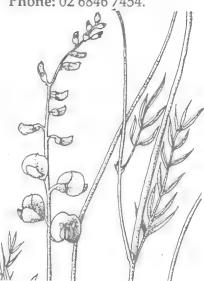
Next Meeting

Date: 7th February 1998 (tentative).

Venue: Orange Botanic Gardens.

Neil Bollinger, Gardens Supervisor from Orange Botanic Gardens, has great plans for our next meeting. Following the meeting we hope to have a tour of the Gardens, followed by lunch and then a field trip possibly to a local mine site to inspect regeneration procedures. Contacts: Neil Bollinger, Orange Botanic Gardens. Phone: 02 6361 4011. Bob Waters, Burrendong Arboretum.

Phone: 02 6846 7454.



Swainsona recta.

Drawing by Diana Boyer, from the collection of the Australian National Botanic Gardens

#### SENSW/ACT Region

John Wilkes, Coordinator

The planning group of the L SE NSW and ACT Region met in early December to discuss the program for 1998. The first meeting will be in late January and will be about the conservation priorities in the Region and the scope for ANPC involvement. The National Coordinator will also talk about ANPC priorities and current issues.

Other activities suggested for 1998 include: a briefing on the progress of the NSW SW Slopes Regional Group; assist, along with members of the SW Slopes Group, in setting up a Murray/Riverina Regional Group; standard signage for roadside and easement remnants; local government environmental reporting requirements; and progress on recovery plans for local endangered plant species and communities.

Members will be contacted in early 1998 about the time and venue of the first meeting. Any comments or queries can be directed to John Wilkes, Phone: 02 62382490; Email: wilkej@ibm.net.



## Tasmanian Region News

Botanical Guardians Go Wild in Tasmania

Andrew Smith, Manager -Community Partnerships, Parks and Wildlife Service Tasmania

couple of years ago the Botanical Guardians were created, under the guidance of the Royal Tasmanian Botanical Gardens (RTBG) Education Service, as the Tasmanian chapter of the ANPC. The aim was to inform and involve the general community about plant conservation. Interested people registered and received a newsletter (not terribly regular) and were on "standby" for special activities.

The RTBG ran a couple of training courses as part of the summer program free for registered members. A major plantout of the endangered Phebalium daviesii at St Helens on the east coast involved guite a few Guardians and also local Landcare members, local council people, Parks and Wildlife staff, TEMCO staff and local St Helens residents. TEMCO is a manufacturing company in the north of the state which had propagated and grown on the plants as part of their partnership with the RTBG and the Parks and Wildlife Service (PWS).

Botanical Guardians has now become part of a new community engagement program developed by the PWS and called WildCARE -

Friends of the Parks and Wildlife Service. The banner for WildCARE is "Community action for natural and cultural heritage conservation" or "People caring for Wild Places". WildCARE sits neatly alongside the various Natural Heritage Trust (NHT) programs by focusing on in-reserve activity and assistance to many of the programs which aren't eligible or high priority for NHT, such as field research. WildCARE consists of two volunteer registers - Nature care and Heritage care - and a branch for Community Action in Reserves (CARes) groups, which will work with, and in, National Park field centres. Botanical Guardians is part of the Nature care volunteer register, with people able to register against various activities including monitoring, replanting, field collections, survey, propagation and community education. When the PWS or the RTBG require assistance with these activities they will be able to call on those people registered as being interested in those activities.

Members pay \$20 annually which entitles them to a discounted Annual Park Pass, free entry to National Parks when undertaking voluntary work, a regular newsletter WildTIMES, discounts at a number of participating stores stores and businesses and the opportunity to participate in WildCARE training courses related to their nominated activities.

WildCARE projects undertaken jointly between the community and PWS will be supported by the WildCARE Trust. The Trust will be made up from membership fees and corporate sponsorship. We have now received our first gold sponsorship of \$10 000 from Paddy Pallin Adventure Equipment. Anyone interested in what we offer Paddy Pallin in return should give me a call or drop a line and I will explain our product.

WildCARE will be launched on 12 December, with Paddy Pallin handing over their \$10 000 support to kick off the WildCARE Trust.

Membership forms are available to anyone, anywhere who would like to support conservation in Tasmania, whether simply in financial membership terms or as a volunteer.

#### Contact me at:

Parks and Wildlife Service, PO Box 44A Hobart Tasmania 7000.

Phone: 03 6233 2185; Fax: 03 5233 8308.

#### **Another Address**

## Australian National Botanic Gardens Photograph Collection

http://www.anbg.gov.au/ images/photo-cd/

This collection includes a list of threatened species and some photographs of these.



#### Sydney Region

Meeting held at North Wyrrabalong National Park, NSW, on 9th November 1997

Gordon Limburg, Member

The latest Sydney Region meeting was held in the field, in the actual habitat of the plants, in the Red Gum Forest, North Wyrrabalong National Park. The forest, between Tuggerah Lake and the ocean, is a community of Sydney Red Gum, Angophora costata, growing in deep aeolian sand.

The main focus of the walk was the overall plant communities themselves, rather than individual species. There were constant reminders of the interdependence of the flora, fauna and the underlying water table. This extends continuously throughout the entire conserved area and, unfortunately, beyond the boundaries of the National Park into adjacent areas of potential development. The layer of fresh water is very mobile, so that any change to its composition at one point changes the rest of the water, and the plant community above it.

Before the peninsula became a National Park in 1991, it was the site of a series of campaigns against development. Some of the campaigners met us at the start. Pat Clifford was there before 1970, Zoe Russell followed on with the next generation, and Boris Branwhite continues to draw attention to communities of threatened rare plants outside the present park boundaries.

We set off to walk in the Red Gum Forest, through ecotones [an ecotone is a transition zone or region separating two regional terrestrial communities. Ed.1 along the much admired new National Park walking track, into predominantly sclerophyll forest which has replaced Cupaniopsis anacardioides littoral rainforest.

With so much to look at and discuss, most of the walk still lay ahead of us when we

stopped for lunch.

Then the track plunged into the dense canopy of the rainforest, still recovering from a fire. A whole new list of species surrounded us. Many plants were new to our intrepid team. Litsea sp., Euroschinus falcata, Endiandra sieberi, all locally significant, supported a list of epiphyte species, until we went through the palm forest to emerge at the lake edge with its fringe of Allocasuarina glauca.

We directed our attention towards a new ecosystem along the shallow lake shore the benthic sea grasses of the vast nursery and its waters that extend a vast wildlife corridor unknown distances

out to sea.

The track wound on uphill, overlooking a wetland community of Melaleuca quinquenervia with its understorey of the big fern, Blechnum camfieldii. As an adequate report on this wetland would fill several Danthonia, only one detail gets a mention here - the paperbark funnel web spiders that live in the trees. The book quoted during our walk claimed this spider has not yet been described, but a more recent enquiry reveals that it is the Megalomorph, Hadronyche cerberea, and known to be dangerous.

Then we reached the ridge of the Red Gum Forest, with an understorey of Backhousia myrtifolia that changed to dense Macrozamia sp., heavy with their big fruit, then the rich mix of wildflowers that crowd the edge of the amphitheatre.

The entire party was so engrossed that no-one noticed as we passed two obvious track junctions, but we found our way back to experience the presence of a giant Angophora costata in which a well-known eagle nest once featured in the conservation campaign that eventually resulted in protection of the forest, and its eventual inclusion in the National Park.

Several people contributed their time and efforts toward the days of planning this walk. The value of their work was amply demonstrated when we arrived where we started at the time predicted, give or take less than two seconds!

There have already been some requests along the line of "When is the next one?"

#### **Next Meeting**

Venue: Cumberland State Forest, Pennant Hills.

Date: 9.30 14 February 1998. Program: This includes slides, a discussion about State Forests' role in plant conservation, a guided walk, lunch (byo), and ameeting to discuss future plans.

RSVP by 6 Feb: to Coordinator Tracey Armstrong, Mt Annan Botanic Garden, Mt Annan. NSW 2567.

Phone: 02 4648 2477;

Fax: 02 4648 2465;

Email: tracey@rbgsyd.gov.au

#### NSW South West Slopes Region

Paul Scannell, Albury Botanic Gardens

After two months of hot, hot, hot we've now got hot, hot, hot and windy. The area is really dry and not looking forward to an El Nino forecast. Everyone's really busy, with the Native Vegetation Act and the possibility of a Regional Vegetation Management Committee coming up.

The Nature Conservation Working Group (NCWG) of the Murray Catchment Management Committee put in a submission to the Natural Heritage Trust for funding for three seedbanks along the Murray. This was to ensure a reliable supply of locally sourced seed for landcare projects and private plantings for the catchment. Albury, Echuca and Mildura were identified as practical locations. The submission was unsuccessful, but Environment Australia have recognised the merit of the project and are looking favourably at an Australia-wide network of seedbanks. Hopefully this may get off the ground sooner than later, as the number of outlets for locally sourced seed is declining almost as quickly as our vegetation.

The NCWG has been working on several other projects in the area and these include an Environmental Weed Strategy and various vegetation mapping schemes.

Very soon, the Albury Botanic Gardens will be obtaining a copy of a collection of 150 slides of our local flora and fauna. These magnificent slides show the world of wildflowers (including orchids), fungi, reptiles and insects that surrounds us in our region and are sure to stir up interest in our local flora and fauna. They will be used for education and entertainment purposes and hopefully will be available early in the New Year.

A very Merry Christmas and a Happy New Year to everyone.

#### Contacts:

Paul Scannell, Albury Botanic Gardens Phone: 02 6023 8241; Fax: 02 6041 6527.

Mark Sheahan,
Department of Land & Water
Conservation
Phone: 02 6041 6777.

#### **Publications**

Conservation Biology for the Coming Decade (Second Edition). 1997. P. L. Fiedler and Kareiva Va Depa. Chapman and Hall.

A text for conservation biology courses. Part IV contains information on integrated plant conservation from Australia.

Ordering: D A Information Services P/L, 648 Whitehorse Road, Mitcham Vic 3132. Phone: +61 3 9210 7777; Fax: +61 3 9210 7788;

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http://www.dadirect.com.au Please quote ISBN 0-412-09651-X for the hardback (approx. Aus\$82) and ISBN 0-412-09661-7 for the paperback (approx. Aus\$61.50). Flora, Fauna and Other Features of the South West Slopes Biogeographic Region, NSW. 1996. Darren Bos and Michael Lockwood. Johnstone Centre of Parks, Recreation and Heritage, Charles Sturt University, Albury, NSW. Report No. 59.

Australian Trees and Shrubs: Species for Land Rehabilitation and Farm Planning in the Tropics. 1997. Eds. John C. Doran and John W. Turnbull. Australian Centre for International Agricultural Research, Canberra ACT.

Making Farm Trees Pay. The Role of Trees in Sustainable Agriculture. Workbook 2. 1997. Guest Editor Rowan Reid. Greening Australia, Rural Industries Research and Development Corporation and Land and Water Resources Research and Development Corporation, Canberra.

A Haven from Storm and Drought. The Role of Trees in Sustainable Agriculture. Workbook 3. 1997. Guest Editors Steve Burke and Allan Wilson. Greening Australia, Rural Industries Research and Development Corporation and Land and Water Resources Research and Development Corporation, Canberra.

Partnerships for Plants:
Biodiversity, Conservation and
Botanical Gardens in Canada.
Proceedings of the 1996
Workshop. Available for
Can\$10 from David A.
Galbraith, Canadian Botanical
Conservation Network, PO
Box 399, Hamilton Ontario
L8N 3H8 Canada.

#### The Australian Network For Plant Conservation Membership List

The date (1996/7/8) indicates that the member has joined or renewed for that year. Addresses and names of contact persons are available from the National Office.

#### Corporate Members

Adelaide Botanic Gardens (1998) Albury Botanic Gardens, NSW (1998) Alcoa of Australia Ltd, WA (1998) Australian Army (1995) Australian National Botanic Gardens (1997)

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Bremer Inst. of TAFE, Old (1997) Caloundra City Council, Qld (1997) Centre for Plant Biodiversity Rsch, ACT

Centre for Plant Conservation Genetics, NSW (1998)

Coffs Harbour City Council, NSW (1998) Conservation & Land Management, WA

Council of the City of Orange, NSW (1997) CSIRO Publishing (1998) Eurobodalla Bot Garden, NSW (1997)

Flecker Botanic Gardens, Qld (1998) Forestry Tasmania (1996)

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Parks and Wildlife Commission, NT (1998)

Parks and Wildlife, Tas (1997)

Qld Dept. Environment Central Coast Region, Qld (1997)

Queensland Herbarium (1998)

Randwick City Council, NSW (1997)

RGC Mineral Sands, WA (1998)

Royal Botanic Gardens, Melbourne, Vic (1997)

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Royal Tasmanian Botanical Gardens (1997) Standing Committee on Forestry, ACT

Strathfield Municipal Council, NSW (1998)

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#### Other Organisations

Assn. of Soc. for Growing Aust Plants

Australian Arid Land Botanic Garden, SA (1999)

Vailima Botanic Gardens, Western Samoa

Wellington Plant Conservation Network

Aust Assn. of Bush Regenerators (1997) Aust. Inland Botanic Gardens, Vic (1997) Aust, Trust for Conservation Volunteers (1996)

Brunswick Valley Heritage Park, NSW (1997)

Burrendong Arboretum Trust, NSW (1997)

Community Biodiversity Network (1997) Cotter Parkcare Group, ACT (1996) Dept. Land & Water Cons, Dubbo NSW (1998)

Friends of Grasslands, ACT (1997) Friends of North Coast Regional BG, NSW (1998)

Greening Australia (ACT/SENSW) (1998) Greening Australia Ltd (1997) Greening Australia (NSW) (1998)

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Greening Australia (Vic) (1996) Greening Western Australia (1996) Hunter Region Botanic Gardens, NSW (1997)

Illawarra Zoological Society, NSW (1996) Indigenous Flora & Fauna Assn (1997) Lismore Rainforest Bot. Garden (1997) Myall Park Botanic Garden, Qld (1997) National Threatened Species Network (1997)

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